

AMENDMENTS TO THE CLAIMS

The following is a copy of Applicants' claims that identifies language being added with underlining ("___") and language being deleted with strikethrough ("—"), as is applicable:

1. (Currently Amended) An ink jet printing apparatus for printing an image on a wide format flexible substrate, comprising:

a substrate and a mechanism for moving the substrate in a first direction,

a print head and a mechanism for moving the print head in a second direction,

characterized in that said print head prints image position control marks concurrently with image printing and said image position control marks define a geometry and position of a printed swath of said image on said substrate,

image position detecting means for detecting image on substrate position, and

a control computer, characterized in that errors in said image on ~~and~~ substrate positions are corrected by adapting the geometry and position of the currently printed swath to the geometry and position of the adjacent earlier printed image swath.
2. (Currently Amended) The apparatus of claim 1, characterized in that said image ~~and substrate~~ position detecting means measures ~~measure~~ the ~~currently printed~~ image on substrate position of a currently printed image relative to an ~~the~~ earlier printed image (~~swath~~) swath.
3. (Currently Amended) The apparatus of claim 1, characterized in that the control computer calculates a the deviation of the current image on substrate position relative to the previous swath position and generates ~~-a~~ an image position correction value.
4. (Currently Amended) The apparatus of ~~claim—1~~ claim 3, characterized in that for correction of said image position error said print head is moved in said first direction in accordance with said image position correction value.

5. (Currently Amended) The apparatus of ~~claim 4~~ claim 3, characterized in that for correction of said image position error the image print data is shifted between inner and peripheral nozzles of said print head in said first printing direction in accordance with said image position correction value.

6. (Canceled)

7. (Currently Amended) The apparatus of claim 1, characterized in that said print head ~~prints said image position control marks concurrently with the image printing and~~ places the image position control marks in places consisting of one of a group of image free areas and image areas.

8. (Currently Amended) The apparatus of claim 1, characterized in that said image position control marks are printed by ink consisting of one of a group of visible ink, invisible ink ~~or~~ and magnetic ink.

9-24. (Canceled)

24-26. (Canceled).

27. (New) An ink jet printing apparatus for printing an image on a wide format flexible substrate, comprising:

a substrate and a mechanism for moving the substrate in a first direction,
a print head and a mechanism for moving the print head in a second direction,
image position detecting means for detecting image on substrate position, and
a control computer, characterized in that errors in said image on substrate positions are corrected by adapting the geometry and position of the currently printed swath to the geometry and position of the adjacent earlier printed image swath,

characterized in that for correction of an image position error said print head is moved in said first direction in accordance with an image position correction value.

28. (New) The apparatus of claim 27, characterized in that said image position detecting means measures the image on substrate position of a currently printed image relative to an earlier printed image swath.

29. (New) The apparatus of claim 27, characterized in that the control computer calculates a deviation of the current image on substrate position relative to the previous swath position and generates said image position correction value.

30. (New) The apparatus of claim 27, characterized in that for correction of said image position error image print data is shifted between inner and peripheral nozzles of said print head in said first printing direction in accordance with said image position correction value.

31. (New) The apparatus of claim 27, characterized in that said print head prints image position control marks concurrently with image printing and said image position control marks define the geometry and position of said printed swath on said substrate.

32. (New) The apparatus of claim 31, characterized in that said image position control marks are printed by ink consisting of one of a group of visible ink, invisible ink and magnetic ink.

33. (New) The apparatus of claim 27, characterized in that said print head prints image position control marks concurrently with the image printing and places the image position control marks in places consisting of one of a group of image free areas and image areas.

34. (New) The apparatus of claim 33, characterized in that said image position control marks are printed by ink consisting of one of a group of visible ink, invisible ink and magnetic ink.

35. (New) An ink jet printing apparatus for printing an image on a wide format flexible substrate, comprising:

a substrate and a mechanism for moving the substrate in a first direction,
a print head and a mechanism for moving the print head in a second direction,
image position detecting means for detecting image on substrate position, and
a control computer, characterized in that errors in said image on substrate positions are corrected by adapting the geometry and position of the currently printed swath to the geometry and position of the adjacent earlier printed image swath,

characterized in that for correction of said image position error image print data is shifted between inner and peripheral nozzles of said print head in said first printing direction in accordance with said image position correction value.

36. (New) The apparatus of claim 35, characterized in that said image position detecting means measures the image on substrate position of a currently printed image relative to an earlier printed image swath.

37. (New) The apparatus of claim 35, characterized in that the control computer calculates a deviation of the current image on substrate position relative to the previous swath position and generates said image position correction value.
38. (New) The apparatus of claim 35, characterized in that said print head prints image position control marks concurrently with image printing and said image position control marks define the geometry and position of said printed swath on said substrate.
39. (New) The apparatus of claim 38, characterized in that said image position control marks are printed by ink consisting of one of a group of visible ink, invisible ink and magnetic ink.
40. (New) The apparatus of claim 35, characterized in that said print head prints image position control marks concurrently with the image printing and places the image position control marks in places consisting of one of a group of image free areas and image areas.
41. (New) The apparatus of claim 40, characterized in that said image position control marks are printed by ink consisting of one of a group of visible ink, invisible ink and magnetic ink.